



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/572,715	03/02/2007	Kai Havukainen	NKO.063.WUS	3402
76385	7590	04/08/2009	EXAMINER	
Hollingsworth & Funk, LLC			JONES, MARCUS D	
8009 34th Avenue South				
Suite 125			ART UNIT	PAPER NUMBER
Minneapolis, MN 54425			3714	
			MAIL DATE	DELIVERY MODE
			04/08/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/572,715	<b>Applicant(s)</b> HAVUKAINEN, KAI
	<b>Examiner</b> MARCUS D. JONES	<b>Art Unit</b> 3714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 26 February 2009.  
 2a) This action is FINAL.      2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-11, 13-18 and 20-23 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-11, 13-18 and 20-23 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/06)  
 Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_
- 5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

## DETAILED ACTION

### ***Response to Amendment***

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.
2. Claims 1-11, 13-18, and 20-23 are currently pending.
3. Claims 12 and 19 are cancelled.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1-11, 13-18, 20 and 21 are rejected under 35 U.S.C. 102 (b) as being anticipated by Bolas et al. (US 5,513,129).**

In reference to claims 1 and 11, Bolas discloses: A method comprising: receiving context data as a music signal (col 15, ln 1-2; *The control signals derived from the music may be extracted from the music directly*); analyzing the musical signal; generating electronic game control data on the basis of the analysis of the music signal (col 5, ln 27-30, *Prerecorded control tracks can be indicative of more sophisticated analysis of the music signal*); and executing the game according to the generated game control data (col 6, ln 35-37, *The control track can be used to program the VR system's response and tailor the system to a song*).

In reference to claims 2 and 6, Bolas discloses: wherein analyzing the music signal includes analyzing tempo of the music and musical notes of the music (col 9, In 40-47 and Figure 3, *each dot represents a pulse of the control track and vertical displacement represents amplitude of the drum beat*).

In reference to claims 3 and 4, Bolas discloses: wherein said receiving context data further comprises processing of context data in response to actual game data (col 9, In 18-35, *Acoustic Etch can set and control parameters in the VR processor and the VR processor can set and control parameters in Acoustic Etch*).

In reference to claims 5 and 18, Bolas discloses: wherein said context data comprises sensor data (col 14, In 21, *sound input from a microphone*).

In reference to claims 7 and 20, Bolas discloses: further comprising receiving context data comprising visual data (col 5, In 41-43, *the control track can include higher level information, such as pictures of a dancer or other performer*).

In reference to claims 8, 9 and 10, Bolas discloses a delay circuit to delay the music signal corresponding to the control track to enable activity in the virtual world, such as lighting and thunder (col 10, In 3-19).

In reference to claim 13, Bolas discloses: Analyzer module comprising: an interface connectable to a data source for receiving context data as a music signal (col 5, In 46-48; *music recorded on CD while the control tracks are recorded on a game cartridge*); an interface connectable to a game execution processor, for outputting game control data, and a processing unit for analyzing the received music signal and generating said game control data in accordance with said received music signal

context data (col 8, ln 37-40, *analyzer receives output of circuit and generates control signal by processing the music signal*).

In reference to claim 14, Bolas discloses: wherein said analyzer is incorporated in a synthesizer module (col 4, ln 62-67, *Acoustic Etch receives music and generates control signals used by the VR system to influence activity in the virtual world*).

In reference to claim 15, Bolas discloses: Electronic gaming device comprising: a first processing unit for executing an electronic game and wherein said first processing unit is adapted for executing an electronic game according to said received game control data (col 8, ln 18-20, *processor is a computer programmed with software enabling a human user to interact with the virtual environment*); an interface connectable to a data source for receiving context data as a music signal (col 5, ln 46-48; *music recorded on CD while the control tracks are recorded on a game cartridge*); a second processing unit for analyzing the music signal context data and generating game control data on the basis of said analyzed music signal context data, said second processing unit being connected to said interface for receiving said music signal context data, said second processing unit further being connected to said first processing unit for transferring generated game control data to said first processing unit (col 8, ln 37-40, *analyzer receives output of circuit and generates control signal by processing the music signal and Figure 1, lead lines 5, 6 and 7*).

In reference to claim 16, Bolas discloses: further comprising a storage for storing of context data or game control data (col 5, ln 46-48; *music recorded on CD while the control tracks are recorded on a game cartridge*).

In reference to claim 17, Bolas discloses: wherein said connection between said first and second processing units is a two-way connection (see Figure 1 and col 9, ln 18-35, *Acoustic Etch can set and control parameters in the VR processor and the VR processor can set and control parameters in Acoustic Etch*).

In reference to claim 21, Bolas discloses that the system's musical output is limited by the user's ability to use the input device (col 3, ln 20-23).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. **Claims 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bolas et al. (US 5,513,129), and further in view of Nagata et al. (US PGPub 2002/0016203).**

In reference to claims 22 and 23, Bolas discloses the invention substantially as claimed except for explicitly disclosing a mobile gaming device. Nagata teaches using a portable gaming terminal in the form of a portable cellular phone (pg 3, par 59).

It would have been obvious to a person having ordinary skill in the art at the time of the invention to have modified Bolas in view of Nagata to make the game system portable.

***Response to Arguments***

6. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARCUS D. JONES whose telephone number is (571)270-3773. The examiner can normally be reached on M-F 9-5 EST, Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John M. Hotaling can be reached on 571-272-4437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Marcus D. Jones/  
Examiner, Art Unit 3714

/John M Hotaling II/  
Supervisory Patent Examiner, Art  
Unit 3714